

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/840,020

REMARKS

Claims 1-9 are all the claims pending in the application. Claims 10-12 are added as new claims.

Applicant thanks the Examiner for allowing claim 1.

Claims 2 and 7-9 are rejected under 35 U.S.C.102(e) as being anticipated by Kawamura et al.(US Patent No. 6,453,110 B1) (“Kawamura”).

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al.(US Patent No. 6,453,110 B1) in view of Min et al.(US Patent No. 6,462,746 B1) (“Min”).

Applicant respectfully traverses these rejections.

Overview of Kawamura

Kawamura describes an electronic equipment control system having a DVD player 400 and a simple digital display device 500 (Fig. 1). The DVD player 400 can send video encoded data which can be decoded by a simple apparatus. Thus, the simple apparatus 500 (Fig. 2) can decode the data received from the DVD player 400 without having to have the complicated arrangement of an intelligent display device 200 (Fig. 4). To achieve this, the DVD includes decoding capabilities (video decoder 42, sub-picture decoder 43 and audio decoder 44) which decode the signal from the disc. An SD video encoder 45 and audio encoder 46 are provided to re-encode the signal so the DVC SD encoder 51 in the simple apparatus 500 can decode the signal. Additionally, the DVD player has an OSD generator 41 that generates on screen menu information for display. The SD video encoder 45 integrates the OSD information into the video

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/840,020

signal sent to the simple apparatus 500, so that the video signal decoded by the DVC SD decoder 51 contains a menu. The menu is controlled as follows: A user presses a button such as "CURSOR UP" on a remote commander 300, causing a signal to be received by the remote commander receiver 31. The CPU 28 of the simple display device 500 sends a command indicative of the command "CURSOR UP" to the DVD player 400 (col. 6, lines 35-48). The CPU 6 of the DVD player 400 controls the OSD generator according to the command (Fig. 3; and col. 7, lines 34 to 65).

Overview of Min

A memory structure and method for implementing an on screen display(OSD) is disclosed. Min separates a command area, which stores small but frequently updated data causing fatal errors due to erroneous data read from a bit map area, which stores relatively larger data, less frequently updated than the command area and which is not sensitive to errors. This arrangement can minimize OSD errors even if the host processor over-writes data while outputting bitmap. Min also provides the global header information containing information on a plurality of OSD regions displayed on the same picture screen and the local header information containing characteristic information of the OSD regions, thereby reducing memory requirement during the step of analyzing the OSD information on the multiple OSD regions and allowing an effective process on the OSD.(Col. 10, lines 29~42, Fig 7)

Overview of the Present Disclosure

The present application discloses a system whereby a cursor can be displayed by a display unit without the source of video having to provide cursor information to the display unit.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/840,020

This is achieved by storing cursor information in the display unit so the cursor can be displayed by receiving cursor location information from the video source. In detail, the display unit (DTV 300, Fig. 2) may have cursor information stored therein (in memory 320, Fig. 2). If such information is stored in the HTV 300, information indicating this is sent to the STB 100 when the STB 100 and HTV 300 are initially connected, and this information is stored in the register (OAPR) 116 of the STB 100. When a user inputs a command signal via remote controller 310, the command signal is transmitted to the CPU of the STB 100 via command input part 322 of the DTV and CPU 324 of the DTV. The OSD generator 114 of STB 100 generates OSD data appropriate to the command. The CPU 120 of STB 100 checks whether OAPR 116 has data indicating that DTV 300 has its own cursor data. If so, CPU 120 outputs a control signal to OSD generator 114, which in turn outputs only cursor display information (page 8, lines 7-14).

Rejection of claims 2 and 7-9 are rejected under 35 U.S.C.102(e) by Kawamura.

Applicant submits that claim 2 is patentable because each and every element of the claim is not disclosed or suggested by Kawamura. For example, claim 2 recites:

An OSD image display apparatus, comprising:

a display apparatus which includes a memory where an own cursor display data is stored, outputs existence information of the own cursor display data, and displays the own cursor display data on a screen by reading the own cursor display data stored in said memory in response to received cursor display location

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/840,020

information;

an OSD source remote controller for generating a cursor display command on the screen of said display apparatus; and

an OSD source for receiving and storing the existence information of said own cursor display data, and transmitting the cursor display location information on the screen of said display apparatus to said display apparatus if the cursor display command is received from said OSD source remote controller.

With respect to the first element, Applicant submits that Kawamura does not teach or suggest any of the claimed display apparatus. For example, the display device 500 of Kawamura does not include a memory where an own cursor display is stored. Rather, Kawamura teaches that the OSD generator 41 in the DVD player 400 is controlled to move the cursor displayed in the menu. The OSD data is encoded by the SD video encoder 45 into DVCR SD format, for decoding by the simple display 500(col. 7, lines 56-65; col. 8, lines 31-46). Thus, there is no teaching or suggestion that the cursor data is stored in display device 500, and therefore no suggestion of the claimed feature.

Additionally, Kawamura does not teach or suggest that the display apparatus “displays the own cursor display data on a screen by reading the own cursor display data stored in said memory in response to received cursor display location information.” Rather, as explained

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/840,020

above, Kawamura teaches that DVC SD decoder 51 of display device 500 simply decodes a video image which contains a cursor. Thus, there is no “own cursor display data” and no “received cursor display location information.”

Regarding the second element of claim 2, “an OSD source remote controller for generating a cursor display command on the screen of said display apparatus”, the Examiner cites Kawamura’s remote commander 300 as satisfying this limitation. The remote commander 300, however, operates the display device.

Regarding the third element, as explained above, Kawamura does not teach or suggest an OSD source that receives and stores the existence information of own cursor display data. Nor does Kawamura teach or suggest an OSD source that transmits the cursor display location information on the screen of a display apparatus to the display apparatus. Instead, the OSD generator 41 generates cursor data which is encoded into the video signal.

At least for the above reasons, Applicant believes that claim 2 is not anticipated by Kawamura.

Claims 7-9, which depend from claim 2, are believed to be not anticipated by Kawamura for at least the reasons submitted for claim 2.

Rejection of claims 3-6 under 35 U.S.C. 103(a) Over Kawamura in view of Min.

Applicant submits that claims 3-6, which ultimately depend from claim 2, are patentable for reasons related to those submitted for claim 2. That is, the deficiencies of Kawamura that were discussed in relation to claim 2 are not made up for by Min. Additionally, Applicant

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/840,020

respectfully submits that the Examiner fails to provide a reasonable suggestion or motivation (absent impermissible hindsight) for combining Kawamura and Min.

New claims 10-12

Applicant submits that new claims 10-12 are patentable over the applied references for reasons similar to those submitted above with respect to claim 2.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

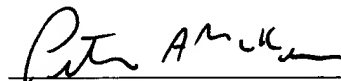
Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER



Peter A. McKenna
Registration No. 38,551

Date: December 20, 2004